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# PRE-APPEAL BRIEF REQUEST FOR REVIEW

| Docket Number (Optional) |
|---|
| MAT-8849US |

| Application Number | Filed |
|---|---|
| 10/578,638 | May 9, 2006 |

| First Named Inventor |
|---|
| Hiroki KAIHORI |

| Art Unit | Examiner |
|---|---|
| 2437 | Jeffrey L. Williams |

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
  Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
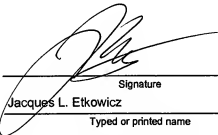   See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
   (Form PTO/SB/96)

☑ attorney or agent of record.
   Registration number _____ 41,738

☐ attorney or agent acting under 37 CFR 1.34.

   Registration number if acting under 37 CFR 1.34 _____

_____
                                    Signature
Jacques L. Etkowicz
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                                Telephone number
June 2, 2010
_____
                                    Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

Applicant's invention relates to vehicle antitheft systems including an immobilizer unit and a portable unit. Applicant's claims include features neither disclosed nor suggested by the cited art. Namely, the cited art do not teach that first and second data processor means, of the respective immobilizer unit and the portable unit, authenticate each other by the combination of: 1) a first authentication which includes passing and comparing first data between the immobilizer and portable units and 2) a second authentication which includes passing second data between the immobilizer and portable units, responsive to the first authentication.

On pages 2-3 of the Office Action dated March 2, 2010, the specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. In particular, it was asserted that the specification failed to provide proper antecedent basis for the recitations of "means for authenticating each other by a first authentication" and "means for authenticating each other by a second authentication." In response to the Office Action, claims 1-4 were amended to remove the phrase "includes means for authenticating." Applicant notes that the Advisory Action dated May 18, 2010, does not address whether the objection to the specification was withdrawn. Accordingly, Applicant respectfully requests that the objection to the specification be withdrawn.

On page 3 of the Office Action, claims 1-24 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, it was asserted that "Applicant has not pointed out where the new (or amended) claim is supported, nor does there appear to be a written description of the claim limitations in the application as filed." As discussed above, claims 1-4 were amended to remove the phrase "includes means for authenticating." Applicant notes that the Advisory Action does not address whether the rejection of claims 1-24 under 35 U.S.C. § 112, first paragraph was withdrawn. Accordingly, Applicant respectfully requests that the rejection of claims 1-24 under 35 U.S.C. § 112, first paragraph be withdrawn.

On pages 4-5 of the Office Action, claims 1-24 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, it was asserted that the phrase "means for authenticating each other by a first authentication" and "means for authenticating each other by a second authentication" renders the scope of the claims

indefinite. As discussed above, claims 1-4 were amended to remove the phrase "includes means for authenticating." Applicant notes that the Advisory Action does not address whether the rejection of claims 1-24 under 35 U.S.C. § 112, second paragraph is withdrawn. Accordingly, Applicant respectfully requests that the rejection of claims 1-24 under 35 U.S.C. § 112, second paragraph, be withdrawn.

On pages 5-6 of the Office Action, claims 5, 10, 15 and 20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, it was asserted that the phrase "the second accumulation data," recited in "lines 8 and 14 of claim 5" lacks antecedent basis. Claims 10, 15 and 20 were rejected for similar reasons. Claims 5, 10, 15, and 20 (as well as claims 6, 11, 16 and 21) were amended accordingly. Applicant notes that the Advisory Action does not address whether the rejection of claims 5, 10, 15 and 20 under 35 U.S.C. § 112, second paragraph is withdrawn. Accordingly, Applicant respectfully requests that the rejection of claims 5, 10, 15 and 20 under 35 U.S.C. §112, second paragraph be withdrawn.

Claims 1-24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsuji et al. (U.S. 2004/0056776) in view of Hisada et al. (U.S. 6,043,752). This ground for rejection is respectfully traversed for the reasons set forth below.

Claim 1, includes features neither disclosed nor suggested by the cited art, namely:

> ... an immobilizer unit including ... first data processor means ...
>
> ... a portable unit including ... second data processor means ...
>
> ... the first data processor means and the second data processor means authenticate each other by a first authentication comprising: (1) the first data processor means transmitting ... an encrypted data based on the first data for mutual authentication stored in the first storage and (2) the second data processor means receiving the encrypted data ... decrypting the encrypted data and comparing the decrypted data to the first data for mutual authentication stored in the third storage; and
>
> ... the first data processor means and the second data processor means authenticate each other by a second authentication, responsive to the first authentication between the first data processor means and the second data processor means, comprising: 1) the second data processor means transmitting

> the second data for mutual authentication stored in the fourth storage ... 2) the first data processor means further _storing_, into the second storage, _the second data for mutual authentication_ ... and _transmitting the second data for mutual authentication_ stored in the second storage ... and 3) the second data processor means further _storing_, into the third storage, _the second data for mutual authentication_ ... (Emphasis Added)

Although not identical to claim 1, claims 2-4 include similar recitations.

Tsuji et al. disclose, in Fig. 1, a remote control system including transmitter 1 and receiver 2. Transmitter 1 includes microprocessor 11 which enciphers a rolling code and uses the enciphered rolling code to produce a transmission code. (Paragraphs [0037-0041] and [0053]). Receiver 2 receives the transmission code from transmitter 1 and deciphers the enciphered rolling code [0042-0044].

Tsuji et al. also disclose, in Fig. 10, an electronic key system including portable unit 30, vehicle transmitter 33 and wireless receiver 34. Portable unit 30 includes a transmitting/receiving circuit for receiving a challenge code signal (from transmitter 33) and transmitting an enciphered challenge code signal (to wireless receiver 34). Portable unit 30 includes a RAM for storing an ID code of portable unit and an enciphering table (Fig. 11). (Paragraphs [0083-0085]).

At Figs. 17 and 18, Tsuji et al. disclose a key code registration between portable unit 30 and vehicle 32. As shown in Fig. 17, portable unit 30 produces and transmits a transmission code including an ID code and an enciphered key code to vehicle 32. (Paragraphs [0109-0117]). As shown in Fig. 18, vehicle 32 receives the transmission code from portable unit 30, extracts the ID code and restores the enciphered key code. Vehicle 32 also compares the extracted ID code with a stored ID code of security ECU 35 to determine whether to store the restored key code. (Paragraphs [0118-0121]).

Tsuji et al., however, do not disclose or suggest that first and second data processor means authenticate each other by: 1) _a first authentication_ which includes passing and comparing _first data_ between an immobilizer unit and a portable unit _and_ 2) _a second authentication responsive to the first authentication_, which includes passing _second data_ between the immobilizer unit and the portable unit, as required by claim 1. Tsuji et al. do not teach a _second authentication, responsive to the first authentication_ using _second data_. Tsuji et al. only teach, in Fig. 10: 1) a portable

unit which receives a challenge code and transmits an enciphered challenge code and 2) performing a key code registration by matching an ID code transmitted from portable unit 30 with a stored ID code in vehicle 32.

On pages 8-9 of the Office Action dated March 2, 2010, the Examiner asserts that Tsuji et al. teach first and second authentication. In particular, the Examiner relies upon paragraphs [0084], [0088] and [0090] of Tsuji et al. as teaching first authentication (page 8 of the Office Action) and relies upon paragraphs [0043-0044], [0049] and [0053] of Tsuji et al. as teaching a second authentication (page 9 of the Office Action). Applicant respectfully disagrees.

Applicant notes that paragraphs [0084], [0088] and [0090] relate to a remote control system shown in Fig. 10, and describe the use of a challenge code to unlock a door. In contrast, paragraphs [0043-0044], [0049] and [0053] relate to a remote control system shown in Fig. 1, and describe the use of a rolling code to allow normal operation. Applicant notes that Figs. 1 and 10 are _different_ remote control systems. The rolling code (Fig. 1) and the challenge code (Fig. 10) are _not both used_. Instead, the rolling code is used separately (in a _different remote control system_) from the challenge code.

Applicant notes that the Advisory Action does not address Applicant's remarks dated May 3, 2010. Instead, the Examiner asserts that "Applicant's arguments have been previously presented (e.g. Remarks, 12/1/2009, 7/27/2009) and the Examiner notes that they are unpersuasive." Applicant respectfully requests that the Examiner address Applicant's remarks of May 3, 2010. Applicant has found no teaching in Tsuji et al. that first and second data processor means authenticate each other using a first authentication with first data and a second authentication, responsive to the first authentication, with second data, as required by claim 1. Furthermore, as acknowledged by the Examiner on page 8 of the Office Action, Tsuji et al. do not disclose that the data transmitted from the first processor means is encrypted, as required by claim 1. Thus, at least for the reasons set forth above, Tsuji et al. do not include all of the features of claim 1.

Hisada et al. disclose, in Fig. 1, a vehicle security system including vehicle control unit 30 and remote-control unit 11. Vehicle control unit 30 produces a cryptographic code and remote-control unit 11 produces a cipher system code in

response to the cryptographic code. (Col. 7, line 47 - Col. 8, line 5 and Col. 16, lines 48-55).
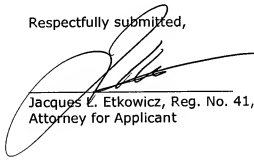
Hisada et al., however, do not disclose or suggest a mutual authentication process between first and second data processor means including 1) first authentication by passing and comparing first data between the immobilizer unit and the portable unit and 2) second authentication, responsive to the first authentication, by passing second data between the immobilizer unit and the portable unit, as required by claim 1. Hisada et al. are silent regarding these features. Thus, Hisada et al. cannot provide the features of claim 1 which are missing from Tsuji et al. Accordingly, allowance of claim 1 is respectfully requested.

Although not identical to claim 1, claims 2-4 include features similar to claim 1 which are neither disclosed nor suggested by the cited art. Accordingly, allowance of claims 2-4 is respectfully requested for at least the same reasons as claim 1.

Claims 5-24 include all of the features of respective claims 1-4 from which they depend and are patentable over the cited art for at least the same reasons as respective claims 1-4.

In view of the arguments set forth above, the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,

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